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PATENT 4-12-01

Docket No. D-387

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jc913 U.S. PRO  
09/696525



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant	-	Lui et al.	)	Information Disclosure
			)	Statement
Title	-	Data Aided Symbol	)	Los Angeles, California
		Timing Tracking	)	Date: 10/19/00
		System for Precoded	)	Commissioner of Patents
		Continuous Phase	)	and Trademarks
		Modulated Signals	)	Washington, DC, 20231

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Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Applicant hereby discloses information believed relevant to the examination of the present application as follows.

Reference 1

Huber J., Liu W. "Data Aided Synchronization of Coherent CPM Receivers", IEEE Transactions on Communications, Vol. 40 pp 178-198, January, 1992.

Huber teaches data aided synchronization of CPM signals. Huber does not disclose data precoding. Huber does not teach using the principal Laurent decomposition for generating symbol timing signal nor carrier phase error signals.

Reference 2,

D'Andrea A.N., Mengali U., Morelli M. "Symbol Timing Estimation with CPM Modulation", IEEE Transaction on Communications, Vol. 44, No. 10 October 1996.

D'Andrea teaches a full response non-data aided symbol timing synchronization. D'Andrea does not teach data aid synchronization. D'Andrea does not address carrier phase error synchronization. D'Andrea is not applicable to partial response CPM signal such as Bt=1/5 GMSK system.

#### REMARKS

The cited references to not teach data bit precoding suitable for subsequence Laurent component isolation for determining symbol timing error and carrier phase error in data aided synchronizers.

Respectfully Submitted

*Derrick Michael Reid*

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